Order No. ITD1107099BE

Service Hints

Plasma Television

<PDP 2011 Model>

TH-P65/50/42VT30Z
TH-P55/50/46GT30Z
TH-P60/55/50/42ST30Z
TH-P50/42UT30Z

TH-P65VT30Z

Troubleshooting Guide

- Ver 1.0-

This service hints is published for technicians and engineers for repair.
And it gives you the information how to judge the defective board of PDP.
In the future,we will improve the contents for more easy diagnostic and troubleshooting.

Please file and use this Service Hints together with the main service manual and other publications related to models.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

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Contents

1. 2011 PDP Line up & Feature Comparison ---------- P3

2. PCB Location & Function ---------- P5

3. PCB List ---------- P10

4. Block Diagram ---------- P12

5. Troubleshooting for picture trouble ---------- P17

6. No Power Troubleshooting (When LED doesn't Blink) ---------- P25

7. Case Example of Picture Trouble ---------- P31

1. 2011 PDP Line up & Feature Comparison (3D model)

1. 2011 PDP Line up & Feature Comparison

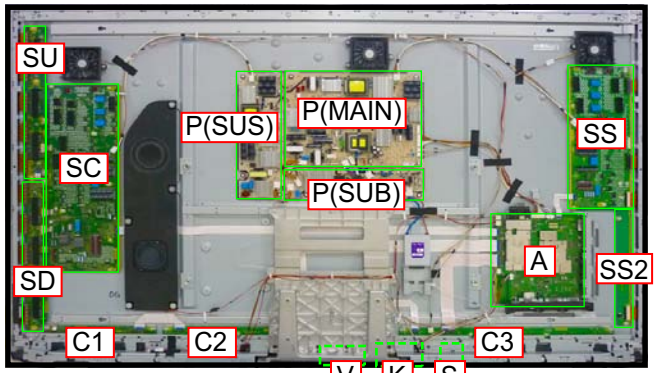
		VT30 Series	GT30 Series	ST30 Series	UT30 Series
Picture	Size	65/50/42	55/50/46	60/55/50/42	50/42
	Full HD 3D	Y	Y	Y	Y
	3D Active Shutter Eyewear	1 included	Not Included	Not Included	Not Included
	Contrast Ratio	5,000,000:1	5,000,000:1	5,000,000:1	2,000,000:1
	Shades of Gradation	6,144	6,144	6,144	6,144
	Moving Picture Resolution	1,080 lines	1,080 lines	1,080 lines	1,080 lines
	THX Mode	Y	Y	—	—
	ISFccc	Y	Y	—	—
	3D Colour Management	Y	Y	—	—
Sound	Speakers	Dual Speaker, Woofer	Full-range x 2 (L, R)	Full-range x 2 (L, R)	Full-range x 2 (L, R)
Networking	HDMI Input	4 (4 side)	4 (4 side)	4 (1 side, 3 rear)	3 (1 side, 2 rear)
	Support Feature	Audio Return Channel (Input 2)	Audio Return Channel (Input 2)	Audio Return Channel (Input 2)	Audio Return Channel (Input 2)
	USB	3 (3 side)	3 (3 side)	3 (3 side)	3 (2 side, 1 rear)
	USB HDD Recording	Y	Y	Y	Y
	SD Card Recording	Y	Y	Y	Y
	PC input	Y	Y	Y	Y
	VIERA Connect	Y	Y	Y	Y
	Wireless LAN Adaptor	Y (included)	Y (included)	WiFi Ready	WiFi Ready
	DLNA	Y	Y	Y	Y
Others	Swivel	Only 50/42	Y (except 55)	Only 50/42	—
	One-Sheet-of-Glass Design	Y	—	—	—

2. PCB Location & Function (3D model)

2. PCB Location & Function

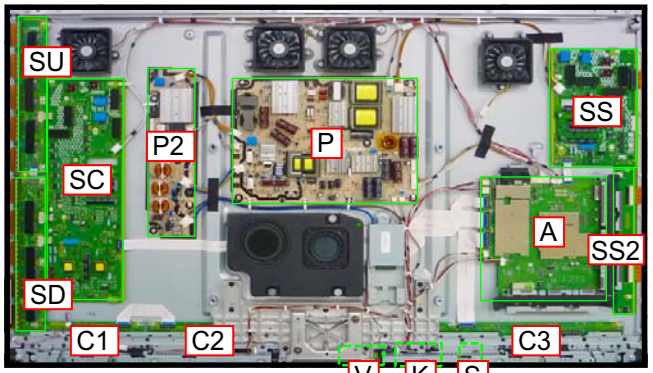
VT30 Series

TH-P65VT30Z



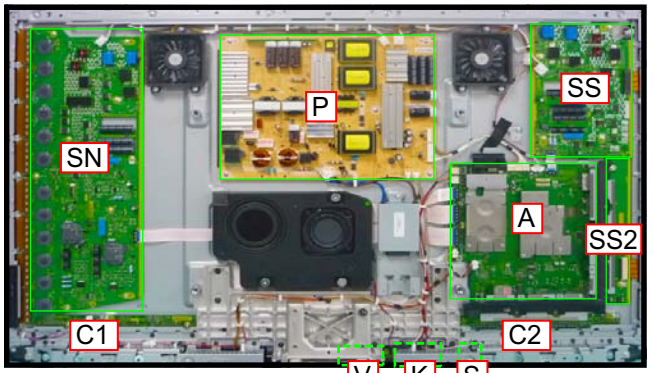
Board Name	Function	Parts Number
P	Power Supply Non serviceable. P(MAIN)-Board should be exchanged for service.	N0AE6KM00008
	Power Supply Non serviceable. P(SUS)-Board should be exchanged for service.	N0AE6KM00004
	Power Supply Non serviceable. P(SUB)-Board should be exchanged for service.	N0AE6KM00005
A	Main AV input, processing	TZTNP01MQUZ
K	Remote receiver, Power LED, C.A.T.S sensor	TXN/K1MTUA
S	Power Switch	TXN/S1MTUA
V	3D Eyewear transmitter	TXN/V1MTUA
C1	Data Driver (Lower Right)	TXNC111UHK
C2	Data Driver (Lower Center)	TXNC211UHK
C3	Data Driver (Lower Left)	TXNC311UHK
SC	Scan Drive	TXNSC11UHK
SS	Sustain Drive	TXNSS11UHK
SS2	Sustain out (Lower)	TXNSS211UHK
SU	Scan out (Upper) Non serviceable. SU-Board should be exchanged for service.	TXNSU11UHK
SD	Scan out (Lower) Non serviceable. SD-Board should be exchanged for service.	TXNSD11UHK
—	———	———

TH-P50VT30Z



Board Name	Function	Parts Number
P	Power Supply	TXNP11QJUE
P2	Power Supply	TXNP21PNUB50
—	———	———
A	Main AV input, processing	TZTNP01MRUZ
K	Remote receiver, Power LED, C.A.T.S sensor	TXN/K1NNUA42
S	Power Switch	TXN/S1MZUJ46
V	3D Eyewear transmitter	TXN/V1MZUJ46
C1	Data Driver (Lower Right)	TXNC11NBUJ50
C2	Data Driver (Lower Center)	TXNC211GGK50
C3	Data Driver (Lower Left)	TXNC311GGK50
SC	Scan Drive	TXNSC11GGKB
SS	Sustain Drive	TXNSS11GGK50
SS2	Sustain out (Lower)	TXNSS211GGK
SU	Scan out (Upper) Non serviceable. SU-Board should be exchanged for service.	TXNSU1MUUA50
SD	Scan out (Lower) Non serviceable. SD-Board should be exchanged for service.	TXNSD1NBUJ50
—	———	———

TH-P42VT30Z

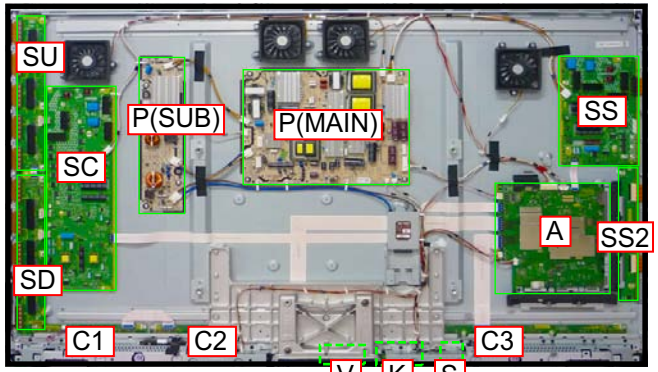


Board Name	Function	Parts Number
P	Power Supply	TXN/P1QKUE42
—	———	———
—	———	———
A	Main AV input, processing	TZTNP01MSUZ
K	Remote receiver, Power LED, C.A.T.S sensor	TXN/K1NNUA42
S	Power Switch	TXN/S1MZUJ46
V	3D Eyewear transmitter	TXN/V1MZUJ46
C1	Data Driver (Lower Right)	TXNC111DHK42
C2	Data Driver (Lower Left)	TXNC211DHK42
—	———	———
—	———	———
SS	Sustain Drive	TXNSS11DHK42
SS2	Sustain out (Lower)	TXNSS211DHK
—	———	———
—	———	———
SN	Scan Drive	TXNSN11DHKB

2. PCB Location & Function

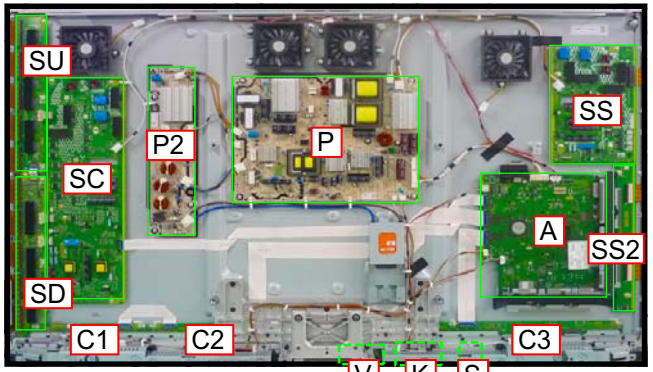
GT30 Series

TH-P55GT30Z



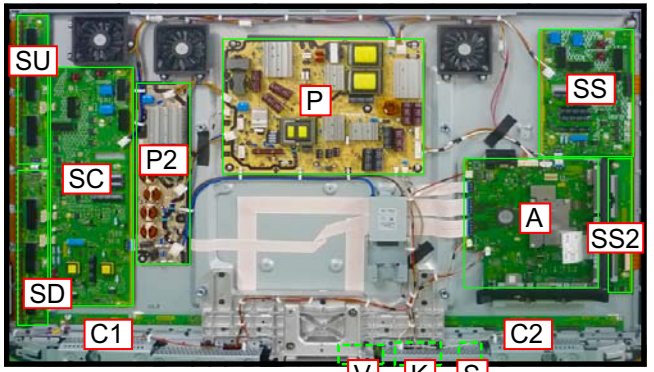
Board Name	Function	Parts Number
P	Power Supply Non serviceable. P(MAIN)-Board should be exchanged for service.	N0AE6KL00005
	Power Supply Non serviceable. P(SUB)-Board should be exchanged for service.	N0AE6KL00009
A	Main AV input, processing	TZTNP01MTUZ
K	Remote receiver, Power LED, C.A.T.S sensor	TXN/K1MTUA
S	Power Switch	TXN/S1MTUA
V	3D Eyewear transmitter	TXN/V1MTUA
C1	Data Driver (Lower Right)	TXNC11MTUA
C2	Data Driver (Lower Center)	TXNC21MTUA
C3	Data Driver (Lower Left)	TXNC31MTUA
SC	Scan Drive	TXNSC1MTUZ
SS	Sustain Drive	TXNSS1MRUA
SS2	Sustain out (Lower)	TXNSS21MTUA
SU	Scan out (Upper) Non serviceable. SU-Board should be exchanged for service.	TXNSU1MTUZ
SD	Scan out (Lower) Non serviceable. SD-Board should be exchanged for service.	TXNSD1MTUA

TH-P50GT30Z



Board Name	Function	Parts Number
P	Power Supply	TXNP11QJUE46
P2	Power Supply	TXNP21PNUB50
A	Main AV input, processing	TZTNP01MUUZ
K	Remote receiver, Power LED, C.A.T.S sensor	TXN/K1NNUA42
S	Power Switch	TXN/S1MZUJ46
V	3D Eyewear transmitter	TXN/V1MZUJ46
C1	Data Driver (Lower Right)	TXNC11NBUJ50
C2	Data Driver (Lower Center)	TXNC211GGK50
C3	Data Driver (Lower Left)	TXNC311GGK50
SC	Scan Drive	TXNSC11GGK50
SS	Sustain Drive	TXNSS11GGK50
SS2	Sustain out (Lower)	TXNSS211GGK
SU	Scan out (Upper) Non serviceable. SU-Board should be exchanged for service.	TXNSU1MUUA50
SD	Scan out (Lower) Non serviceable. SD-Board should be exchanged for service.	TXNSC11GGK50

TH-P46GT30Z

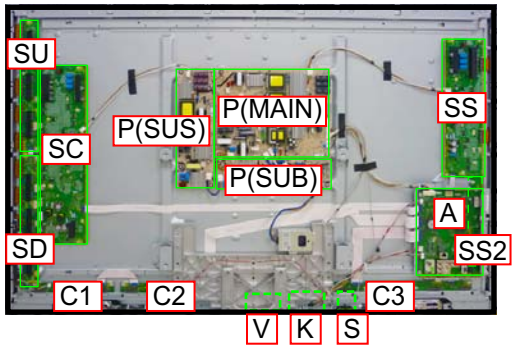


Board Name	Function	Parts Number
P	Power Supply	TXNP11QJUE46
P2	Power Supply	TXNP21QMUE46
A	Main AV input, processing	TZTNP01MVUZ
K	Remote receiver, Power LED, C.A.T.S sensor	TXN/K1NNUA42
S	Power Switch	TXN/S1MZUJ46
V	3D Eyewear transmitter	TXN/V1MZUJ46
C1	Data Driver (Lower Right)	TXNC11NCUJ46
C2	Data Driver (Lower Left)	TXNC21QVUJ46
—	———	———
SC	Scan Drive	TXNSC1MVUZ46
SS	Sustain Drive	TXNSS1MVUZ46
SS2	Sustain out (Lower)	TXNSS21MVUZ
SU	Scan out (Upper) Non serviceable. SU-Board should be exchanged for service.	TXNSU1MVUA46
SD	Scan out (Lower) Non serviceable. SD-Board should be exchanged for service.	TXNSD1NCUJ46

2. PCB Location & Function

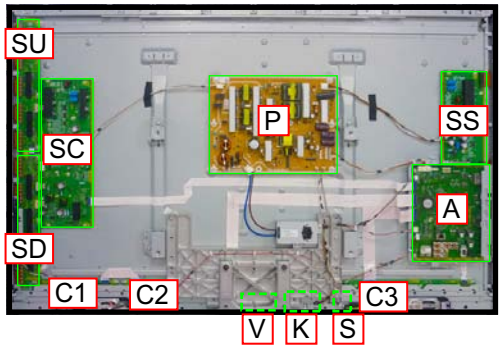
ST30 Series

TH-P60ST30Z



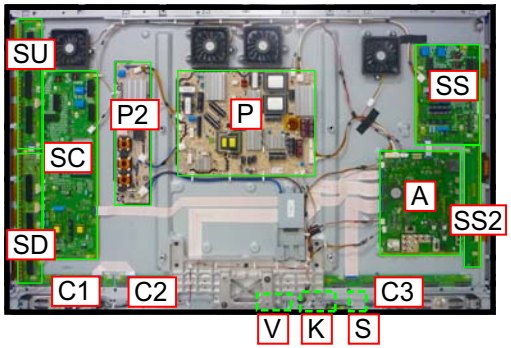
Board Name	Function	Parts Number
P	Power Supply Non serviceable. P(MAIN)-Board should be exchanged for service.	N0AE6KM00008
	Power Supply Non serviceable. P(SUS)-Board should be exchanged for service.	N0AE6KM00004
	Power Supply Non serviceable. P(SUB)-Board should be exchanged for service.	N0AE6KM00005
A	Main AV input, processing	TZTNP01MWUZ
K	Remote receiver, Power LED, C.A.T.S sensor	TXN/K1MTUA
S	Power Switch	TXN/S1MTUA
V	3D Eyewear transmitter	TXN/V1MTUA
C1	Data Driver (Lower Right)	TXNC111AFJ
C2	Data Driver (Lower Center)	TXNC211AFJ
C3	Data Driver (Lower Left)	TXNC311AFJ
SC	Scan Drive	TXNSC11AFJ
SS	Sustain Drive	TXNSS11AFJ
SS2	Sustain out (Lower)	TXNSS211AFJ
SU	Scan out (Upper) Non serviceable. SU-Board should be exchanged for service.	TXNSU11AFJ
SD	Scan out (Lower) Non serviceable. SD-Board should be exchanged for service.	TXNSD11AFJ
—	———	———

TH-P55ST30Z



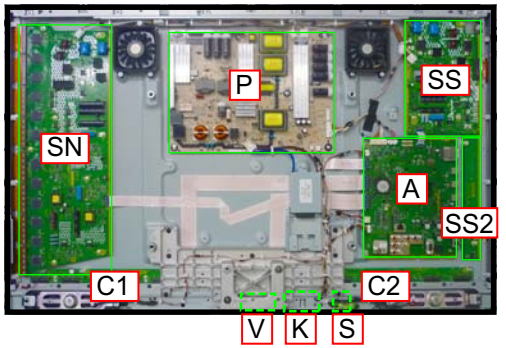
Board Name	Function	Parts Number
P	Power Supply Non serviceable. P-Board should be exchanged for service.	TXN/P1MZUA
—	———	———
—	———	———
A	Main AV input, processing	TZTNP01MXUZ
K	Remote receiver, Power LED, C.A.T.S sensor	TXN/K1MTUA
S	Power Switch	TXN/S1MTUA
V	3D Eyewear transmitter	TXN/V1MTUA
C1	Data Driver (Lower Right)	TXNC11MTUA
C2	Data Driver (Lower Center)	TXNC21MZUA
C3	Data Driver (Lower Left)	TXNC31MZUA
SC	Scan Drive	TXNSC1MZUA
SS	Sustain Drive	TXNSS1MZUA
—	———	———
SU	Scan out (Upper) Non serviceable. SU-Board should be exchanged for service.	TXNSU1MZUA
SD	Scan out (Lower) Non serviceable. SD-Board should be exchanged for service.	TXNSD1MTUA
—	———	———

TH-P50ST30Z



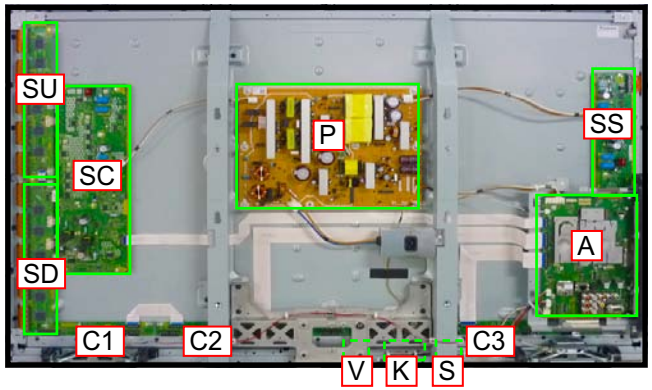
Board Name	Function	Parts Number
P	Power Supply	TXNP11QJUE46
P2	Power Supply	TXNP21PNUB50
—	———	———
A	Main AV input, processing	TZTNP01MYUZ
K	Remote receiver, Power LED, C.A.T.S sensor	TXN/K1NCUA42
S	Power Switch	TNPA5394
V	3D Eyewear transmitter	TNPA5396
C1	Data Driver (Lower Right)	TNPA5318
C2	Data Driver (Lower Center)	TXNC211GGK50
C3	Data Driver (Lower Left)	TNPA5320AC
SC	Scan Drive	TXNSC11GGK50
SS	Sustain Drive	TXNSS11GGK50
SS2	Sustain out (Lower)	TXNSS211GGK50
SU	Scan out (Upper) Non serviceable. SU-Board should be exchanged for service.	TXNSU1MUUA50
SD	Scan out (Lower) Non serviceable. SD-Board should be exchanged for service.	TNPA5337
—	———	———

TH-P42ST30Z



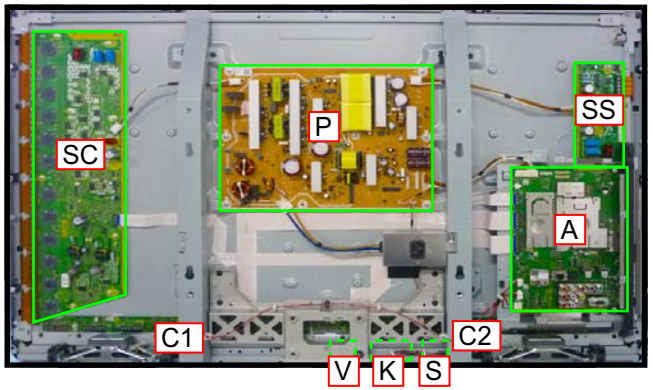
Board Name	Function	Parts Number
P	Power Supply	TXN/P1QKUE42
—	———	———
—	———	———
A	Main AV input, processing	TZTNP01MZUZ
K	Remote receiver, Power LED, C.A.T.S sensor	TXN/K1NCUA42
S	Power Switch	TNPA5394
V	3D Eyewear transmitter	TNPA5396
C1	Data Driver (Lower Right)	TNPA5314
C2	Data Driver (Lower Left)	TXNC211DHK42
—	———	———
—	———	———
SS	Sustain Drive	TXNSS11DHK42
SS2	Sustain out (Lower)	TXNSS211DHK42
—	———	———
—	———	———
SN	Scan Drive	TXNSN11DHK42

TH-P50UT30Z



Board Name	Function	Parts Number
P	Power Supply Non serviceable. P-Board should be exchanged for service.	N0AE6KK00009
A	Main AV input, processing	TZTNP01NJUZ
K	Remote receiver, Power LED, C.A.T.S sensor	TXN/K1NNUA42
V	3D Eyewear transmitter	TXN/V1QYUJ46
C1	Data Driver (Lower Right)	TXNC11NBUJ50
C2	Data Driver (Lower Center)	TXNC21NBUJ50
C3	Data Driver (Lower Left)	TXNC31NBUJ50
SC	Scan Drive	TXNSC11JGK50
SS	Sustain Drive	TXNSS11JGK50
SU	Scan out (Upper) Non serviceable. SU-Board should be exchanged for service.	TXNSU11JGK50
SD	Scan out (Lower) Non serviceable. SD-Board should be exchanged for service.	TXNSD11JGK50
—	————	————

TH-P42UT30Z



Board Name	Function	Parts Number
P	Power Supply Non serviceable. P-Board should be exchanged for service.	N0AE6KK00008
A	Main AV input, processing	TZTNP01NJUZ
K	Remote receiver, Power LED, C.A.T.S sensor	TXN/K1NNUA42
V	3D Eyewear transmitter	TXN/V1QYUJ46
C1	Data Driver (Lower Right)	TXNC111DHK42
C2	Data Driver (Lower Left)	TXNC211FHK42
—	————	————
—	————	————
SS	Sustain Drive	TXNSS11FHK42
—	————	————
—	————	————
SN	Scan Drive	TXNSN11FHK42

3. PCB List
(3D model)

3. PCB List

	VT30 series			GT30 series			ST30 series				UT30 series	
Board	TH-P65VT30Z	TH-P50VT30Z	TH-P42VT30Z	TH-P55GT30Z	TH-P50GT30Z	TH-P46GT30Z	TH-P60ST30Z	TH-P55ST30Z	TH-P50ST30Z	TH-P42ST30Z	TH-P50UT30Z	TH-P42UT30Z
P	N0AE6KM00008 (MAIN)	TXNP11QJUE	TXN/P1QKUE42	N0AE6KL00005 (MAIN)	TXNP11QJUE46	TXNP11QJUE46	N0AE6KM00008 (MAIN)	TXN/P1MZUA	TXNP11QJUE46	TXN/P1QKUE42	N0AE6KK00009	N0AE6KK00008
	N0AE6KM00004 (SUS)	TXNP21PNUB50 (P2)	----	----	TXNP21PNUB50 (P2)	TXNP21QMUE46 (P2)	N0AE6KM00004 (SUS)	----	TXNP21PNUB50 (P2)	----	----	----
	N0AE6KM00005 (SUB)	----	----	N0AE6KL00009 (SUB)	----	----	N0AE6KM00005 (SUB)	----	----	----	----	----
A	TZTNP01MQUZ	TZTNP01MRUZ	TZTNP01MSUZ	TZTNP01MTUZ	TZTNP01MUUZ	TZTNP01MVUZ	TZTNP01MWUZ	TZTNP01MXUZ	TZTNP01MYUZ	TZTNP01MZUZ	TZTNP01NJUZ	TZTNP01NJUZ
K	TXN/K1MTUA	TXN/K1NNUA42	TXN/K1NNUA42	TXN/K1MTUA	TXN/K1NNUA42	TXN/K1NNUA42	TXN/K1MTUA	TXN/K1MTUA	TXN/K1NCUA42	TXN/K1NCUA42	TXN/K1NNUA42	TXN/K1NNUA42
S	TXN/S1MTUA	TXN/S1MZUJ46	TXN/S1MZUJ46	TXN/S1MTUA	TXN/S1MZUJ46	TXN/S1MZUJ46	TXN/S1MTUA	TXN/S1MTUA	TNPA5394	TNPA5394	----	----
V	TXN/V1MTUA	TXN/V1MZUJ46	TXN/V1MZUJ46	TXN/V1MTUA	TXN/V1MZUJ46	TXN/V1MZUJ46	TXN/V1MTUA	TXN/V1MTUA	TNPA5396	TNPA5396	TXN/V1QYUJ46	TXN/V1QYUJ46
C1	TXNC111UHK	TXNC11NBUJ50	TXNC111DHK42	TXNC11MTUA	TXNC11NBUJ50	TXNC11NCUJ46	TXNC111AFJ	TXNC11MTUA	TNPA5318	TNPA5314	TXNC11NBUJ50	TXNC111DHK42
C2	TXNC211UHK	TXNC211GGK50	TXNC211DHK42	TXNC21MTUA	TXNC211GGK50	TXNC21QVUJ46	TXNC211AFJ	TXNC21MZUA	TXNC211GGK50	TXNC211DHK42	TXNC21NBUJ50	TXNC211FHK42
C3	TXNC311UHK	TXNC311GGK50	----	TXNC31MTUA	TXNC311GGK50	----	TXNC311AFJ	TXNC31MZUA	TNPA5320AC	----	TXNC31NBUJ50	----
SC	TXNSC11UHK	TXNSC11GGKB	----	TXNSC1MTUZ	TXNSC11GGK50	TXNSC1MVUZ46	TXNSC11AFJ	TXNSC1MZUA	TXNSC11GGK50	----	TXNSC11JGK50	----
SS	TXNSS11UHK	TXNSS11GGK50	TXNSS11DHK42	TXNSS1MRUA	TXNSS11GGK50	TXNSS1MVUZ46	TXNSS11AFJ	TXNSS1MZUA	TXNSS11GGK50	TXNSS11DHK42	TXNSS11JGK50	TXNSS11FHK42
SS2	TXNSS211UHK	TXNSS211GGK	TXNSS211DHK	TXNSS21MTUA	TXNSS211GGK	TXNSS21MVUZ	TXNSS211AFJ	----	TXNSS211GGK50	TXNSS211DHK	----	----
SU	TXNSU11UHK	TXNSU1MUUA50	----	TXNSU1MTUZ	TXNSU1MUUA50	TXNSU1MVUA46	TXNSU11AFJ	TXNSU1MZUA	TXNSU1MUUA50	----	TXNSU11JGK50	----
SD	TXNSD11UHK	TXNSD1NBUJ50	----	TXNSD1MTUA	TXNSC11GGK50	TXNSD1NCUJ46	TXNSD11AFJ	TXNSD1MTUA	TNPA5337	----	TXNSD11JGK50	----
SN	----	----	TXNSN11DHKB	----	----	----	----	----	----	TXNSN11DHK42	----	TXNSN11FHK42

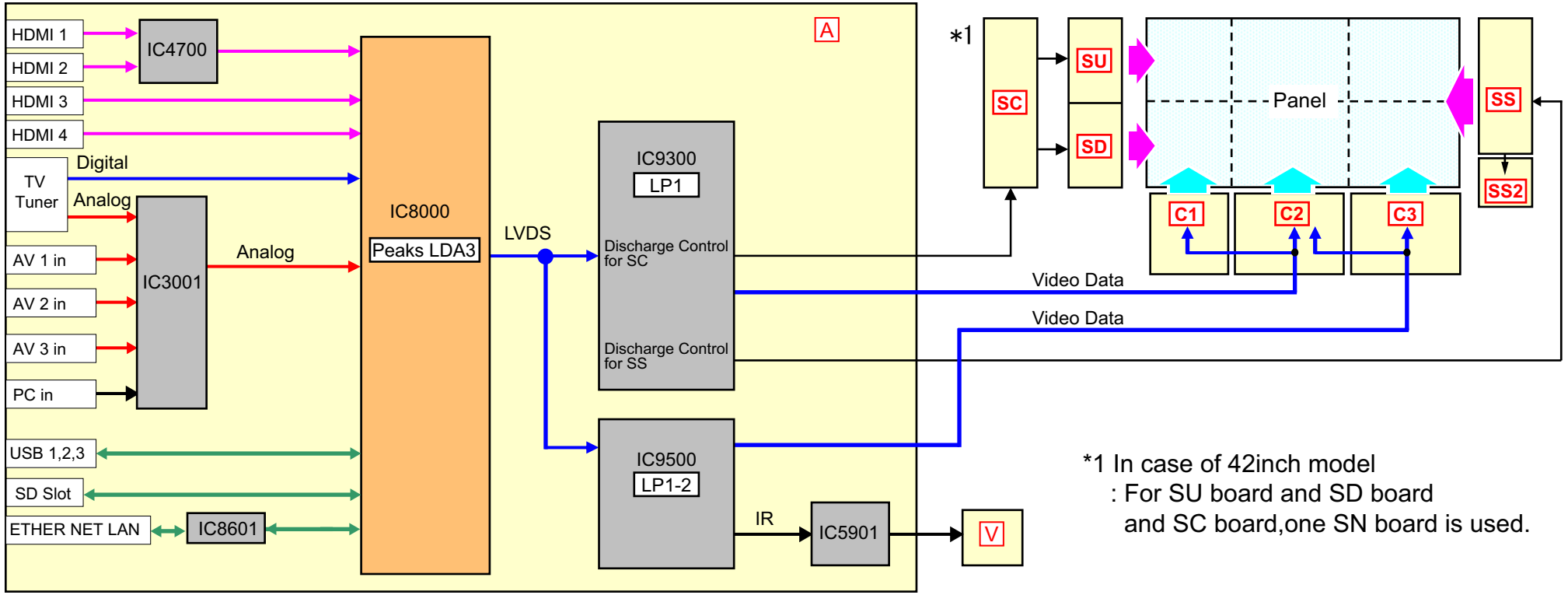
4. Block Diagram
(3D Model)

4.Block Diagram

Signal Processing Circuit (1) VT30 series

<PCB Function>

[e.g.TH-P50VT30Z]



*1 In case of 42inch model
: For SU board and SD board
and SC board,one SN board is used.

IC3001
: Video Switch
(Audio Switch)
IC8601
: ETHER NET I/F

IC4700
: HDMI SW
IC8000
: Peaks LDA3
(Digital Video Processor)
IC5901
: IR LED DRIVER

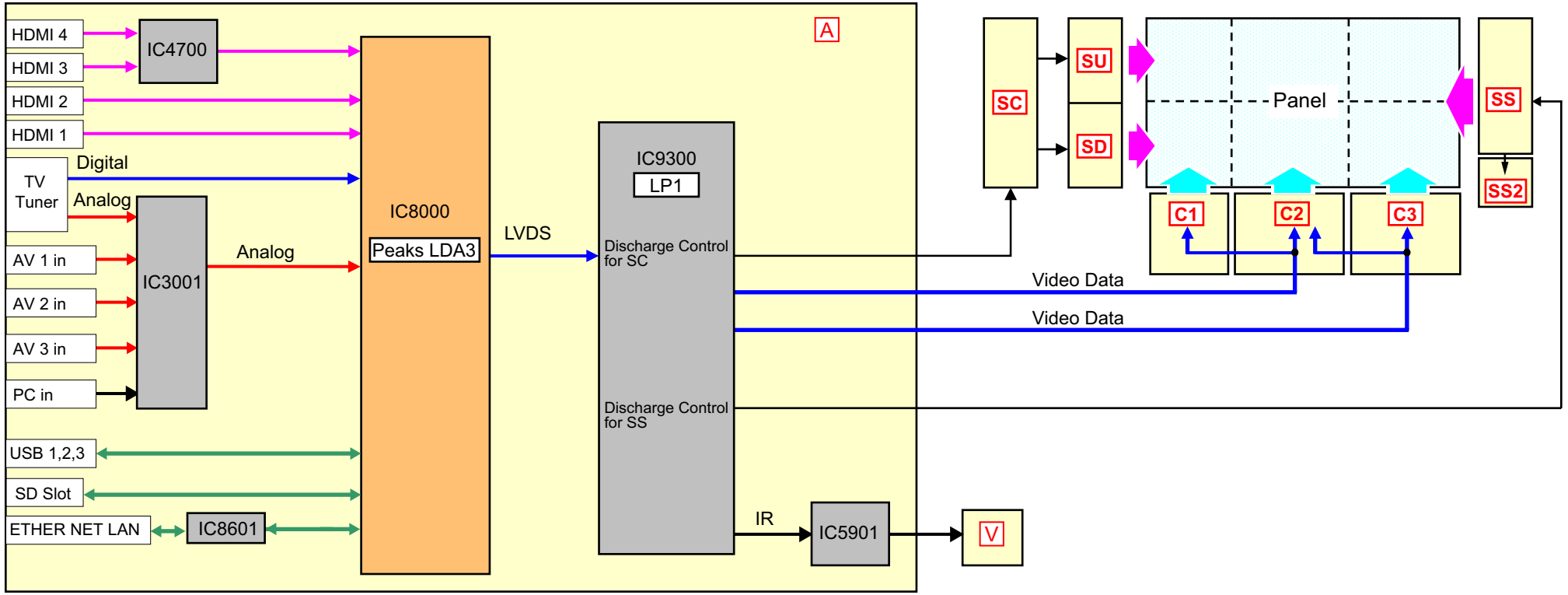
IC9300
: LP1
Sub Field Processor,
Discharge Control
Plasma AI
IC9500
: LP1-2
Sub Field Processor,
Plasma AI

4.Block Diagram

Signal Processing Circuit (2) GT30 series

<PCB Function>

[e.g.TH-P50GT30Z]



IC3001
: Video Switch
(Audio Switch)
IC8601
: ETHER NET I/F

IC4700
: HDMI SW
IC8000
: Peaks LDA3
(Digital Video Processor)
IC5901
: IR LED DRIVER

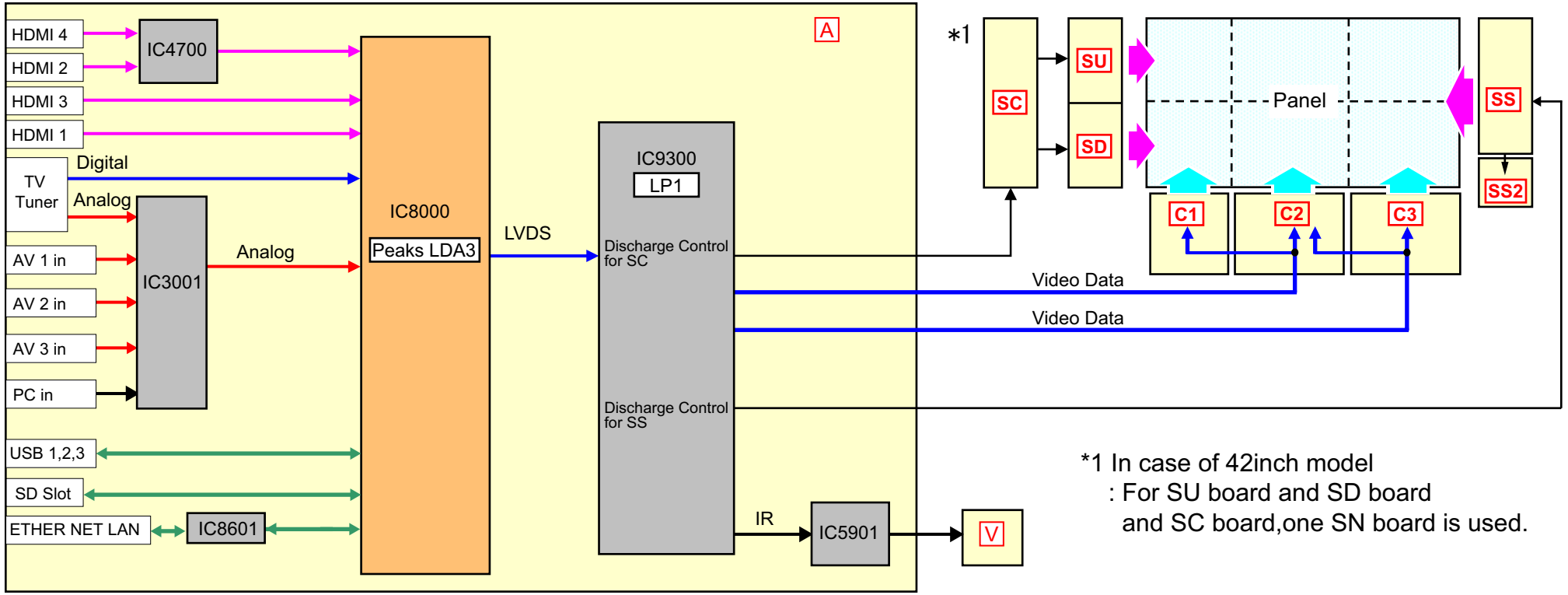
IC9300
: LP1
Sub Field Processor,
Discharge Control
Plasma AI

4.Block Diagram

Signal Processing Circuit (3) ST30 series

<PCB Function>

[e.g.TH-P50ST30Z]



*1 In case of 42inch model
: For SU board and SD board
and SC board,one SN board is used.

IC3001
: Video Switch
(Audio Switch)
IC8601
: ETHER NET I/F

IC4700
: HDMI SW
IC8000
: Peaks LDA3
(Digital Video Processor)
IC5901
: IR LED DRIVER

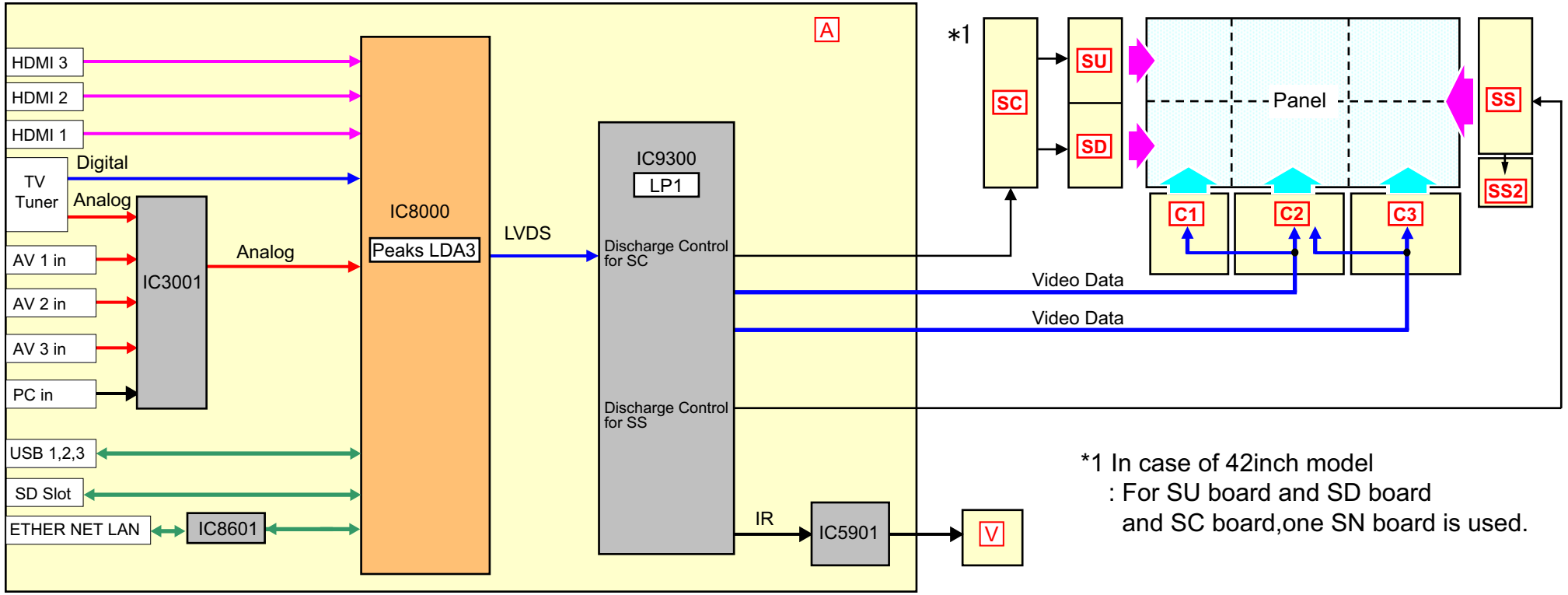
IC9300
: LP1
Sub Field Processor,
Discharge Control
Plasma AI

4.Block Diagram

Signal Processing Circuit (4) UT30 series

<PCB Function>

[e.g.TH-P50UT30Z]



*1 In case of 42inch model
: For SU board and SD board
and SC board,one SN board is used.

IC3001
: Video Switch
(Audio Switch)
IC8601
: ETHER NET I/F

IC8000
: Peaks LDA3
(Digital Video Processor)
IC5901
: IR LED DRIVER

IC9300
: LP1
Sub Field Processor,
Discharge Control
Plasma AI

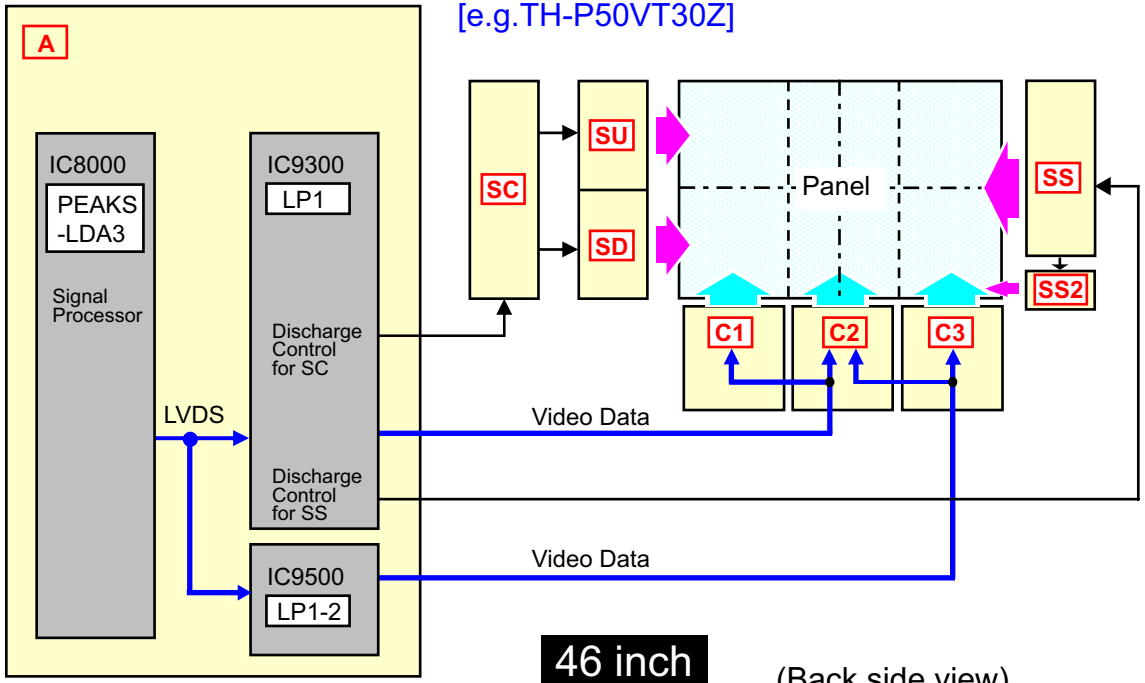
5. Troubleshooting (3D model)

Relation of board and display area

You know the possible defective board by picture trouble area.

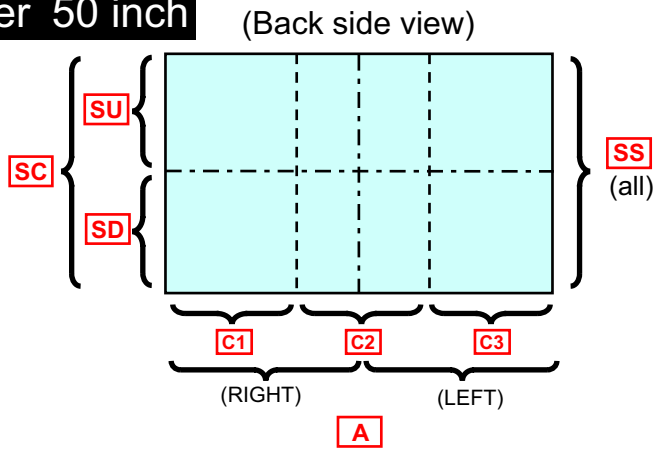
<Display device block diagram>

[e.g.TH-P50VT30Z]

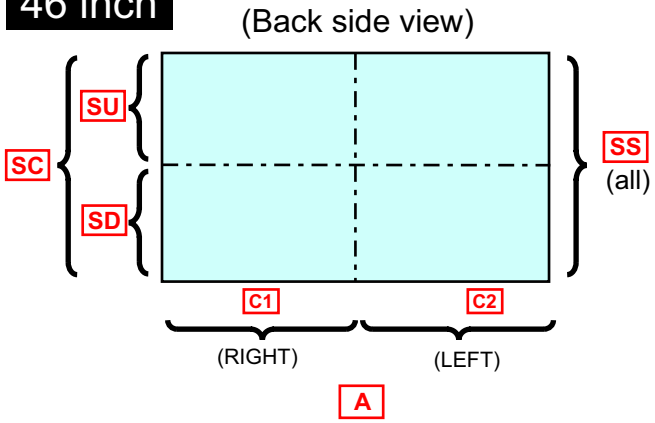


<Relation of defective board and picture trouble area >

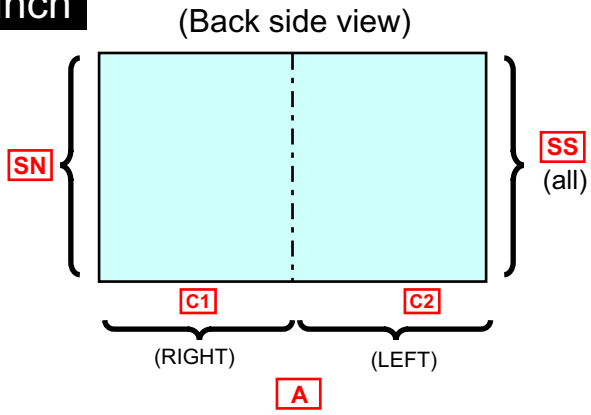
Over 50 inch



46 inch



42 inch

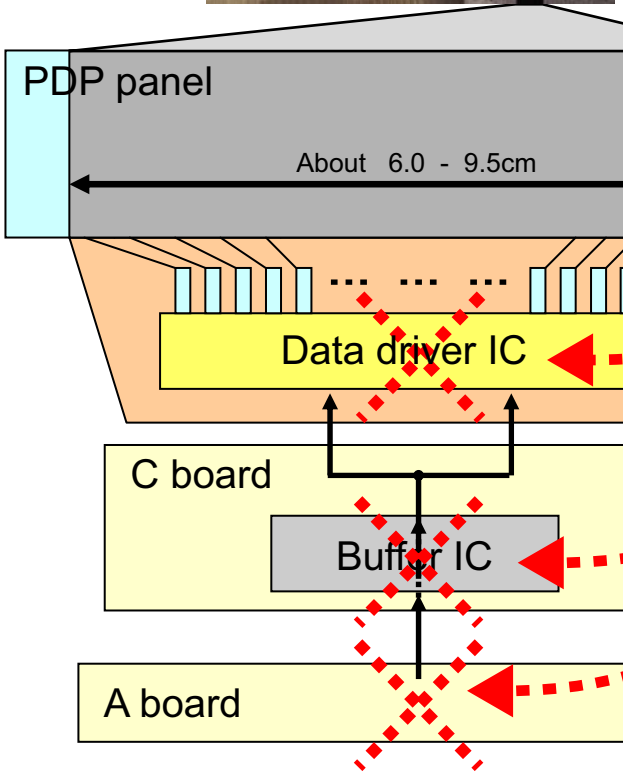


Picture trouble [diagnosis of vertical line]

PDP panel defective (Data driver IC defective)

Width is narrower than FPC

Data driver IC defect= PDP panel defect



Data driver IC or C or A board defective

Width is same as FPC

Picture trouble [diagnosis of horizontal line]

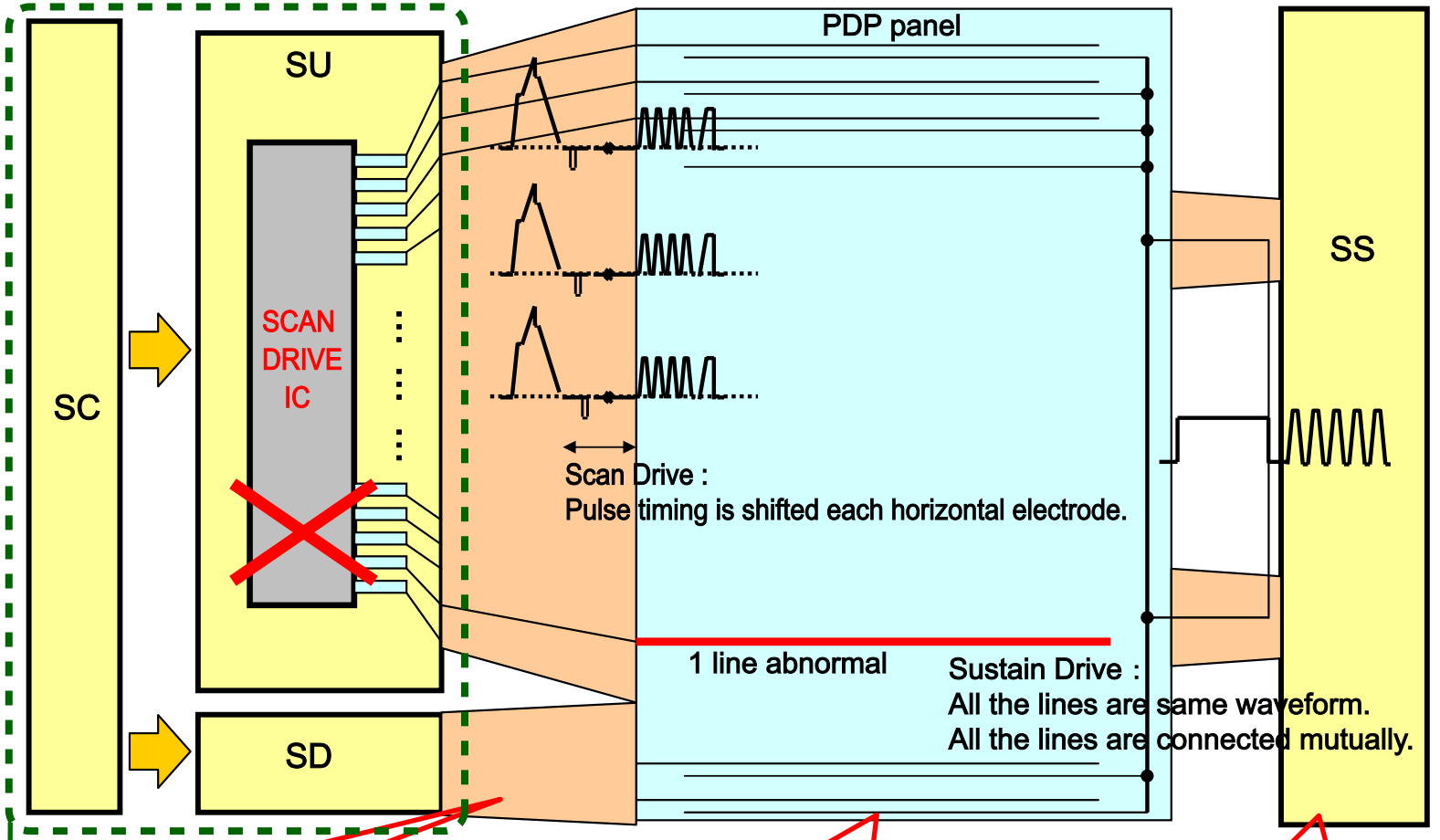
Over 46inch

SU board defective

SD board defective

42inch

SN board defective



When FFC is damaged, it is needed to replace the panel because of FFC is bonded to the panel directly.

If horizontal line is showed, it is possible that defect of one pin of scan drive IC or failure of connection to the panel or damage of electrode on the panel.

SS board defect doesn't cause horizontal line problem because of electrodes on SS board are connected mutually.

In case of 42inch models : For SU board and SD board and SC board,one SN board is used.

< Mirror function >

Mirror Function : Picture can be reversed left and right or up and down.

For vertical lines problems, this feature can help to determine if the problem is the A board or the panel.
If the position of the line/lines changes when performing this function, the A board is possibly defective.
The rear cover does not have to be removed to do this.

To enter the Mirror Function.

From the Service Mode Menu, Press 1 or 2 to select "OPTION".
Press 3 or 4 to select "MIRROR".
Press the VOLUME up or down button to change the Mirror's data.
Data = 00 Default data (Mirror function is off).
Data = 01 Picture is reversed left and right.
Data = 02 Picture is reversed up and down.

<How to diagnose by using "Mirror function">

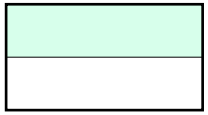
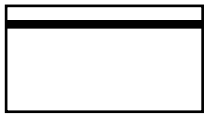
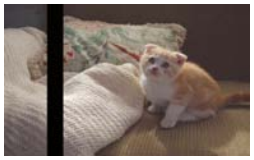
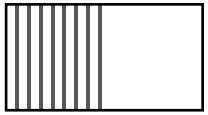
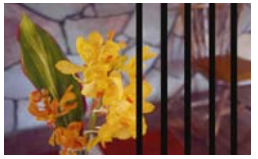
Vertical Line	Data : 00	→ Data : 01	
		the picture & line : reverse	only the picture : reverse
		Defective Block : A board	Defective Block : Panel or C board
Horizontal Line	Data : 00	→ Data : 02	
		the picture & line : reverse	only the picture : reverse
		Defective Block : A board	Defective Block : Panel or SD board *

* In case of 42inch models : For SU board and SD board and SC board,one SN board is used.

5.Troubleshooting for picture trouble

Summary of picture trouble

< Some part of screen : VT30 / GT30 / ST30 / UT30 series >

Symptom	Actual symptom	Defective board
Trouble at Upper or Lower half 		Over 46inch : SU / SD 42inch : SN
Horizontal line (Upper or Lower side) 		Over 46inch : SU / SD or panel 42inch : SN or panel
Trouble at Left or Center or Right part (46,42inch model : Left or Right half)	Over 50inch 46/42 inch	Over 50inch : C1-C3 46/42inch : C1,C2
Vertical line (Width is same as FPC)		C or A or PDP panel
Vertical line (Width is narrower than FPC)		PDP panel
Regular bar 		A

Diagnosis by Test Pattern

<Model>

VT30, GT30, ST30, UT30 series

<Symptom>

Picture Noise, Full Vertical Line,Abnormal color

<How to enter the Test Pattern>

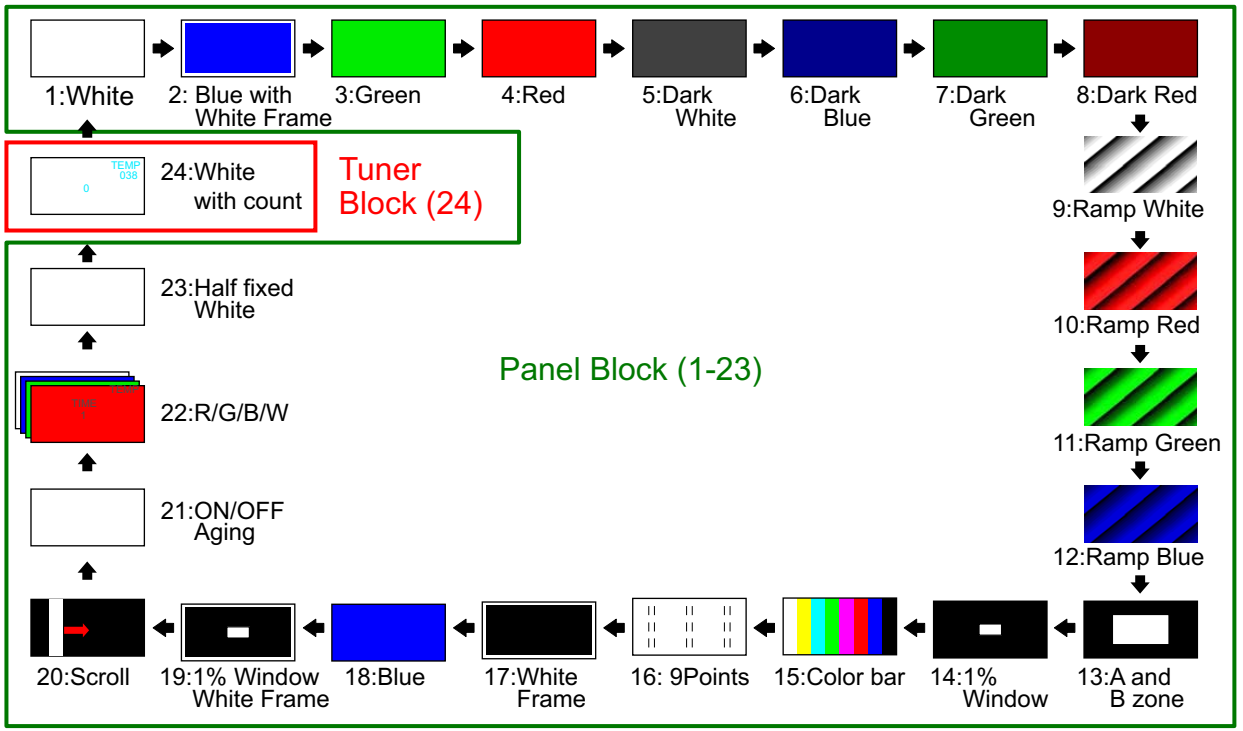
1.Press the “VOLUME -” on the TV set and push “ i ” button of remote controller 3 times at the same time.

2. After this procedure, you can enter “Service Mode” and select “AGING”, then “Test pattern” will appear.

3. Push “3" button of Remote Controller to select the test pattern mode to forward.

4. Push “4“ button of Remote Controller to select the test pattern mode to reverse.

<Test Pattern (Normal)>



<Diagnosis>

How to diagnose by using test pattern

Abnormal picture
(Picture Noise, Full Vertical Line,Abnormal color)

Test pattern (1-23)	Defective Block (Board)
Abnormal	Panel Block (A Board or Panel)
Normal	Tuner Block (A Board)

No picture

Test pattern	Defective Block (Board)
No picture	Panel Block (A Board or Panel)
O.K	Tuner Block (A Board)

Summary of picture trouble

< All area of screen >

Symptom	Actual symptom	Defective board
Irregular Color		A board
All vertical line		A board
Abnormal electric discharge		Over 46inch : SC / SS board in case of 42inch SN / SS board

6. No Power Troubleshooting (When LED doesn't Blink)

6.No Power Troubleshooting — When LED doesn't Blink

[Model]
TH-P65/50/42VT30Z, TH-P55/50/46GT30Z, TH-P60/55/50/42ST30Z

	Power LED error code	Contents	Check points
1	Power LED is Off (No picture/No sound)	P-board abnormal P15V:voltage down F15V:voltage down	P-board SN/SC-board SS-board A-board
2	Power LED is green blinks [High-speed blinking] (No picture/No sound)	P15V:voltage down	P-board SN/SC-board SS-board A-board
3	Power LED is green (No picture/No sound)	P15V:voltage down	SN/SC-board A-board

Troubleshooting Flowcharts
: refer to 27 page - 29 page

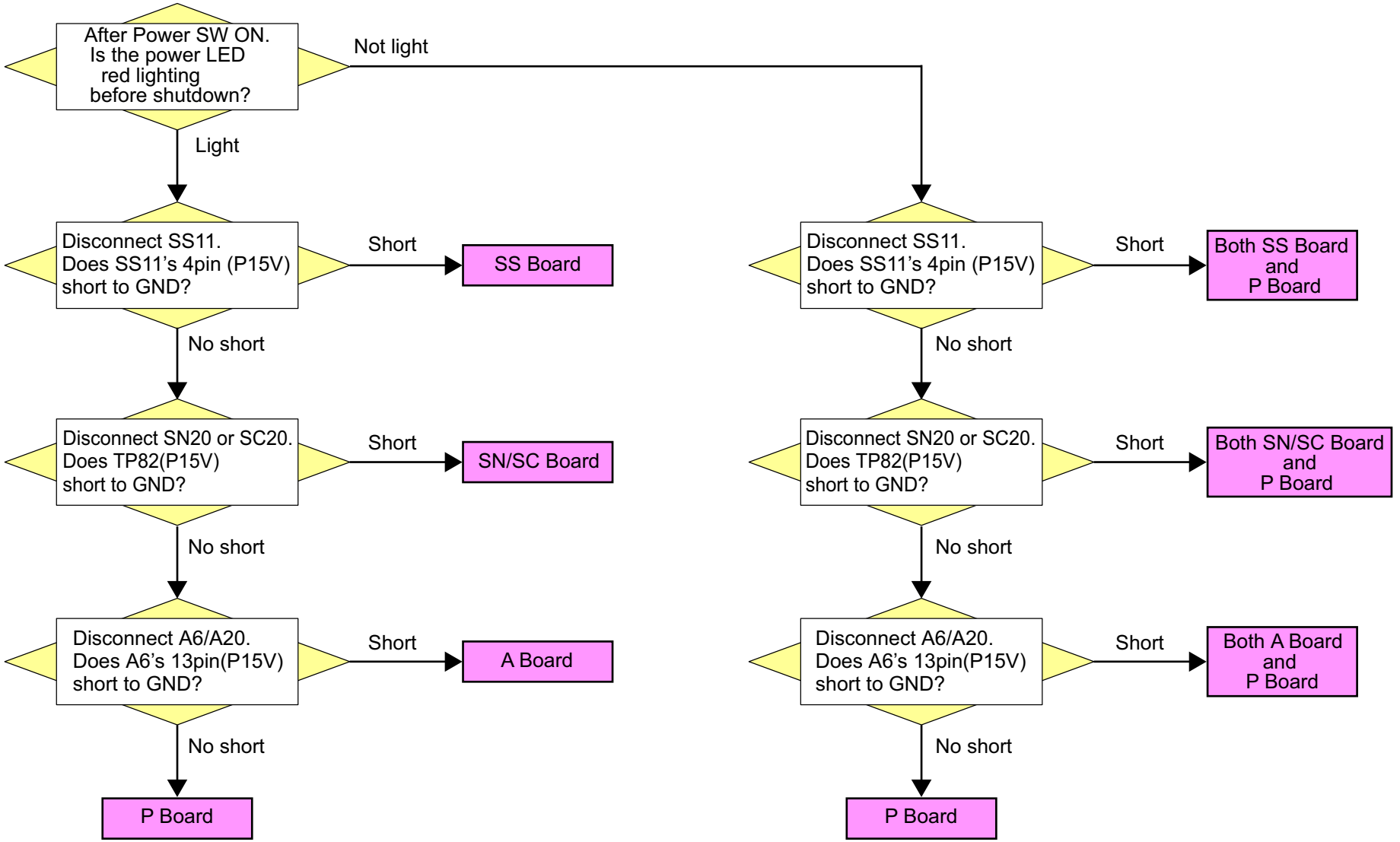
[Model]
TH-P50/42UT30Z

	Power LED error code	Contents	Check points
1	Power LED is green (No picture/No sound)	Vsus:voltage down P15V:voltage down	P-board SN/SC-board SS-board A-board

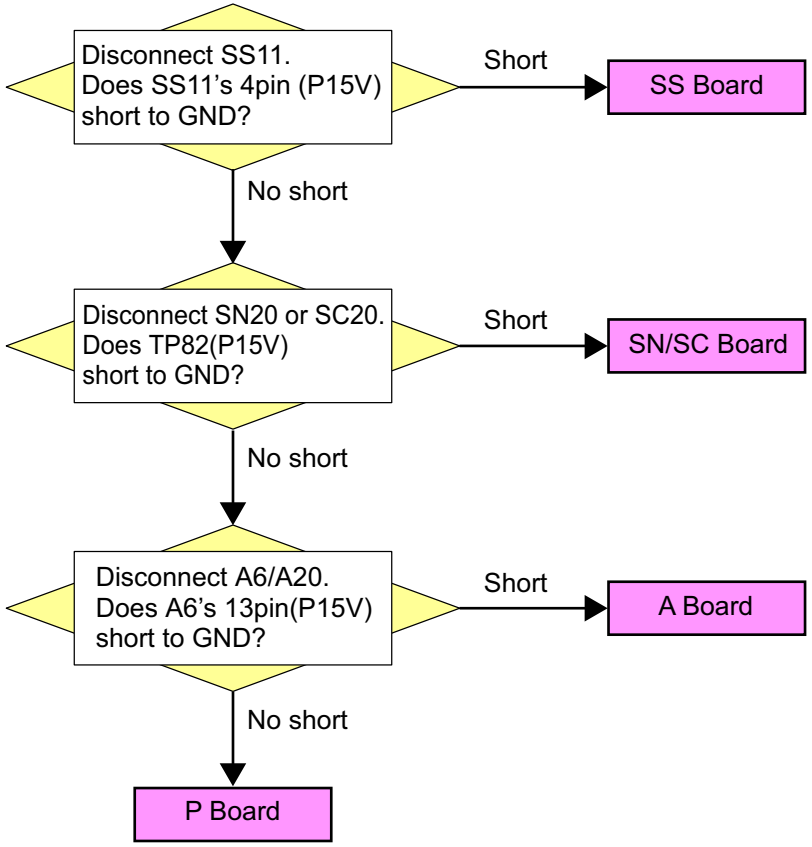
Troubleshooting Flowcharts
: refer to 30 page

[Model] TH-P65/50/42VT30Z, TH-P55/50/46GT30Z, TH-P60/55/50/42ST30Z

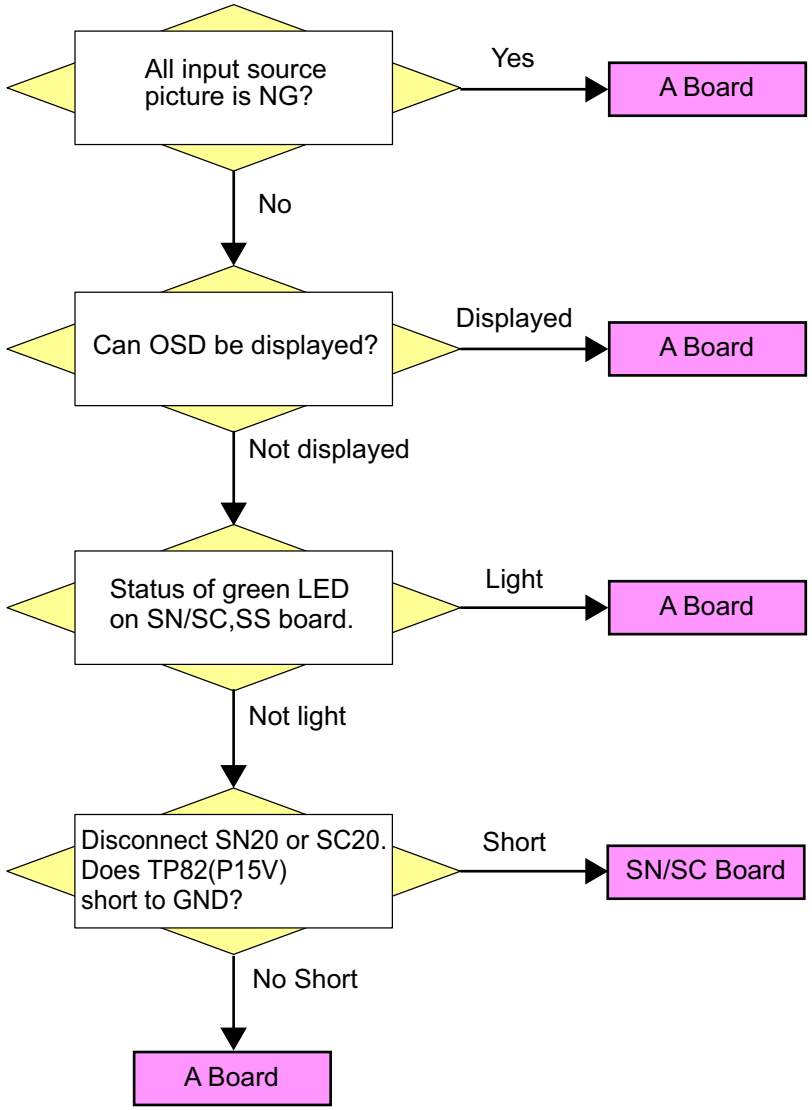
< 1. Power LED is Off : No Picture, No Sound >



< 2. Power LED is green blinking [High-speed blinks] : No Picture, No Sound >

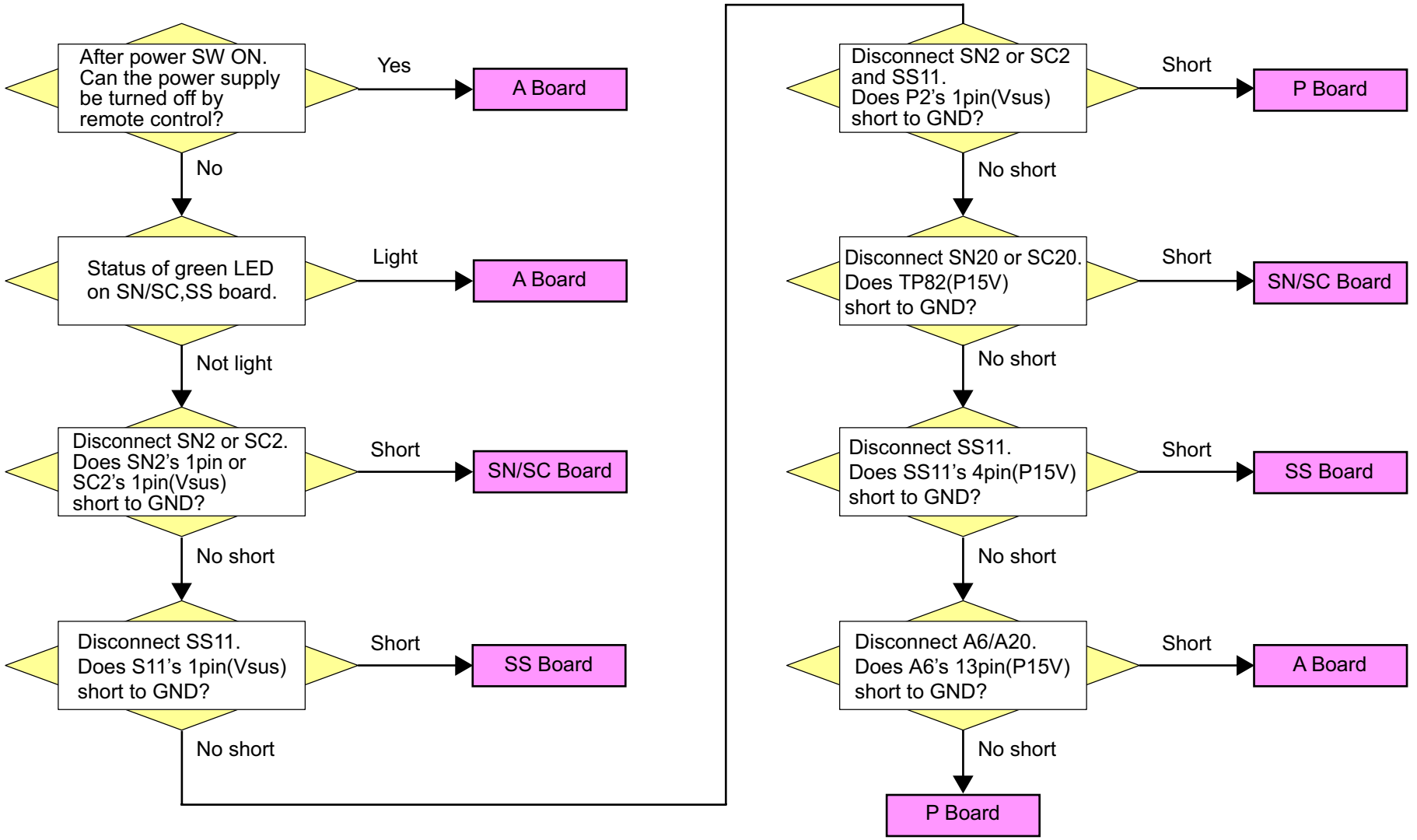


< 3. Power LED is green : No Picture, No Sound >



[Model] TH-P50/42UT30Z

< 1. Power LED is green : No Picture, No Sound >



7. Case Example of Picture Trouble

7.Case Example of Picture Trouble

[1] Model : 2011 model

[2] Symptom : Rainbow vertical bar

[3] Defective parts :

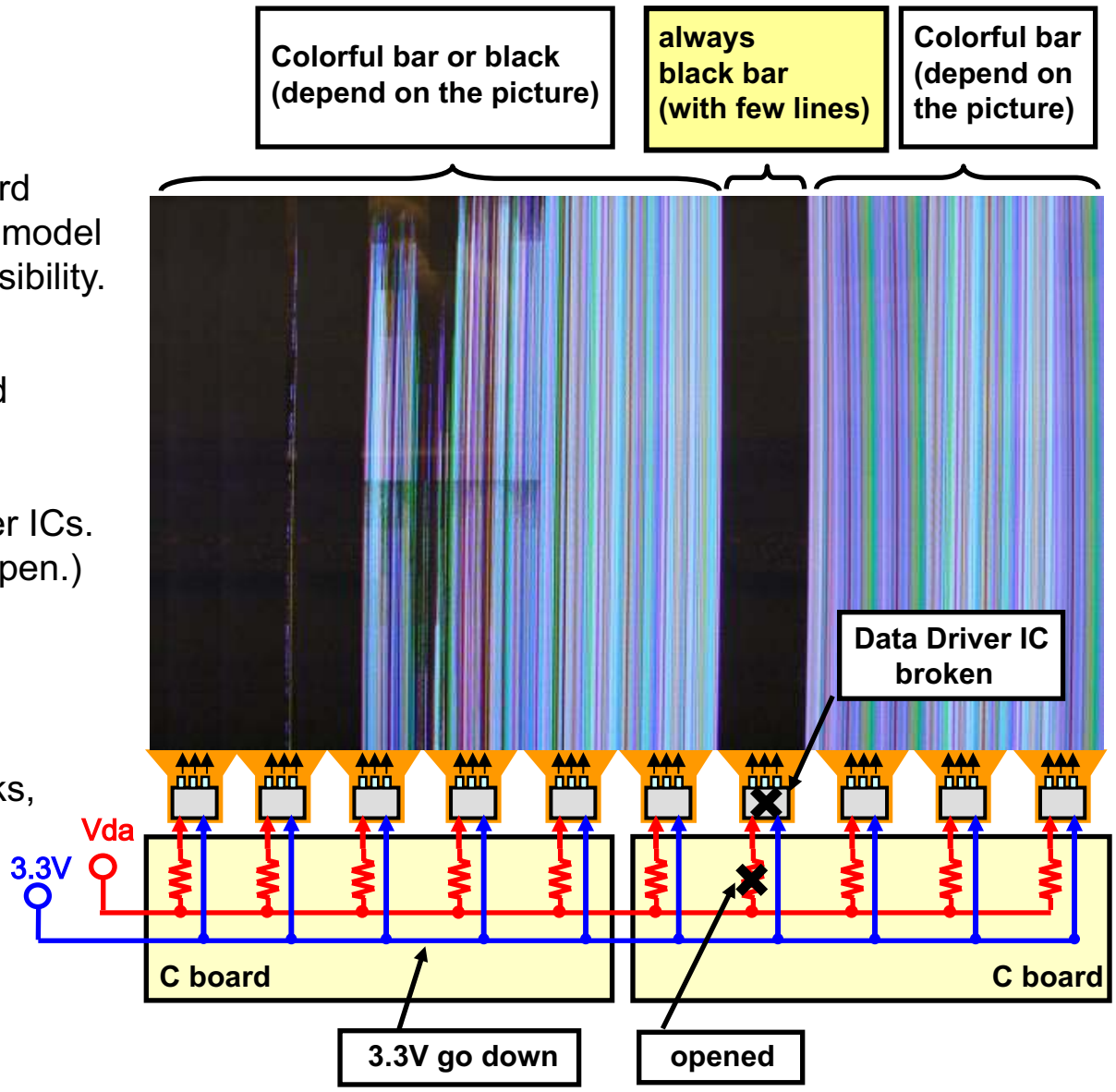
This symptom is very likely to be the A board defect for the previous model, but for 2011 model the Panel and C board defect is a high possibility.

[4] Summary :

If one of the Data Driver IC is defective and 3.3V go down, the other Data Driver ICs don't work correctly.
Because 3.3V is common for all Data Driver ICs.
(Vda line is isolated due to resister being open.)

[5] Check point (Trouble shoot) :

Check by displaying some images.
If the position (length) of colorful bars change and there are some black bar blocks, the data driver IC is defective.
If there is no black bar block, check the connection of cables between A and C board.
If trouble still persists, the A board could be defective.



[6] Detail Troubleshoot : Short check of the P3.3V line

Unplug the TV

Check short circuit between P3.3V and GND. (at one of Capacitor on C1/2/3 board)

Not Shorted → Check connections between the A board and the C boards. (A31,A32,C11,C21) Make sure that all connectors are properly seated.

Not fixed yet → Replace the A board

Shorted

Remove connectors A31 and A32 from A board. And check short circuit again.

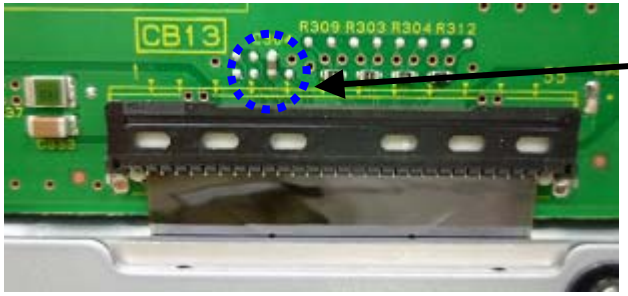
Not Shorted → Replace the A board

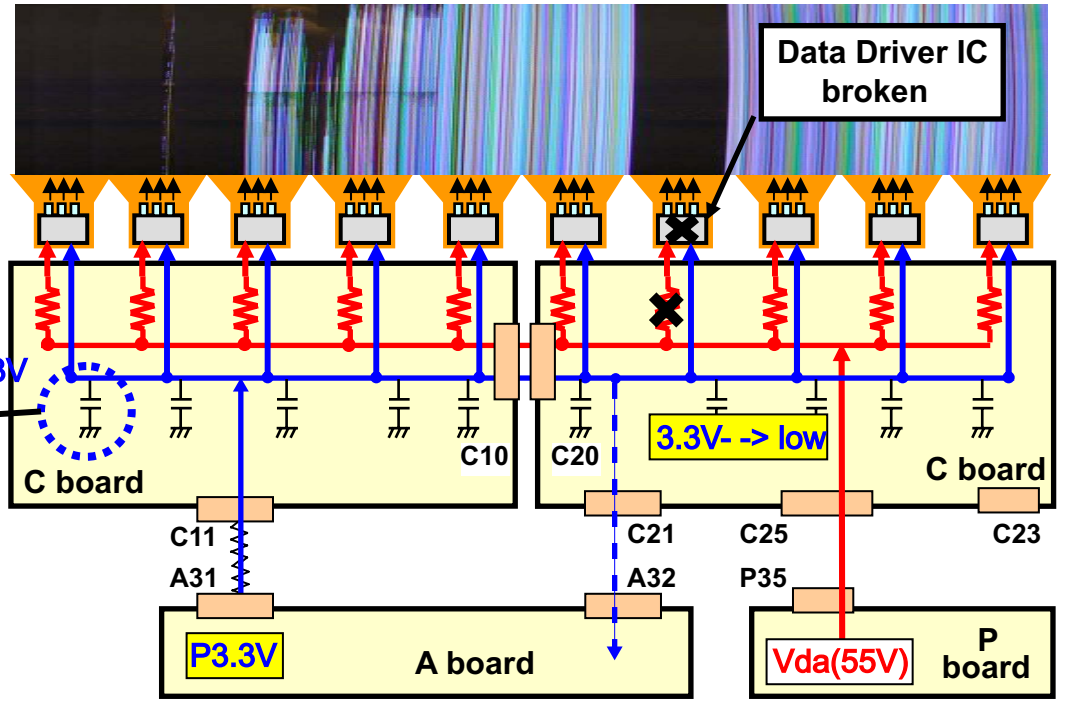
Shorted

Replace PDP Panel and C# board

There is a capacitor beside the each connector CB##.

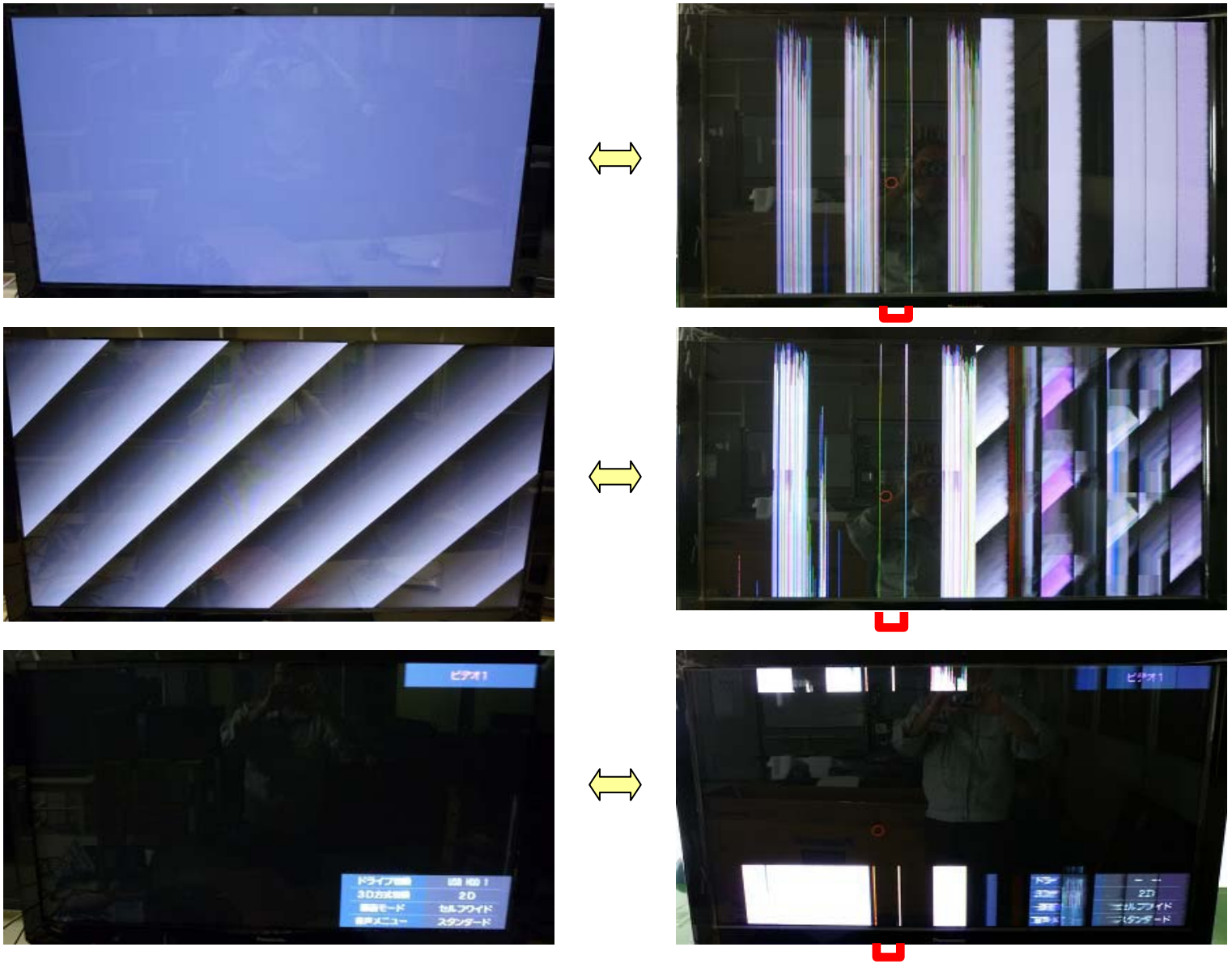
P3.3V





7.Case Example of Picture Trouble

[7] Symptom example (another image)

Normal Image

Defective unit